



Editorial

Hypertension in the elderly

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India stands at the crossroads of a demographic transformation. With over 10% of its citizens now aged 60 years or older—roughly 104 million individuals—aging is no longer a distant concern but a defining feature of the nation's public health landscape. This figure is projected to nearly double by 2050, reaching 19.5% of the population.¹ Against this backdrop, hypertension—the so-called silent killer—has emerged as one of the most pressing yet under-recognized challenges in geriatric health. Hypertension prevalence escalates with advancing age due to physiological changes such as arterial stiffening, reduced baroreceptor sensitivity, renal impairment, and cardiac remodeling.²

In the elderly, these alterations magnify cardiovascular risk and contribute to the growing burden of stroke, coronary artery disease, heart failure, and chronic kidney disease. Yet, despite the availability of cost-effective diagnostic tools and proven therapies, hypertension among India's elderly remains grossly underdiagnosed, undertreated, and uncontrolled. The National Family Health Survey-5 (NFHS-5) reports that nearly 48.4% of Indians aged 60 and above are hypertensive, while the Longitudinal Ageing Study in India (LASI) estimates a prevalence of 32.4%, with 42.3% undiagnosed, 6% untreated, and 18.7% undertreated.^{3,4}

Hypertension prevalence rises sharply after the age of 40 and accelerates beyond 60 years, with declining hypertension-free survival.⁵ Age itself is the single largest risk factor, but multiple modifiable contributors have been identified in recent analyses. Higher body mass index, physical inactivity, tobacco use, and diabetes are independent predictors of hypertension in older adults. Socioeconomic

status, education, and residence (urban/rural) further modulate risk, reflecting disparities in access to health information and care. For instance, rural elderly populations tend to have lower rates of awareness and control of hypertension, driven in part by limited outreach and lower health literacy.^{6,6} LASI data show that rural residents have 12.4 percentage points higher undiagnosed rates and 1.7 points higher untreated rates, while urban areas paradoxically show 7.2 points higher undertreatment.³

Hypertension in older adults is not merely a numerical rise in blood pressure, it is a complex pathophysiological state influenced by vascular aging, autonomic dysfunction, and comorbidities. Isolated systolic hypertension, the most common subtype in the elderly, results from reduced arterial compliance and widened pulse pressure. This variant confers heightened risk for left ventricular hypertrophy, myocardial ischemia, and stroke.⁸ Moreover, age-related renal decline alters sodium handling and volume regulation, rendering elderly patients more sensitive to salt intake. Polypharmacy, orthostatic hypotension, cognitive decline, and frailty further complicate antihypertensive therapy in older adults.

Hypertension management in the elderly is nuanced. While pharmacological treatment remains the cornerstone, nonpharmacological strategies—weight reduction, dietary salt restriction, increased physical activity, and cessation of tobacco use—have emerged as critical, especially for frail older adults where polypharmacy raises the risk of adverse events. The frequency of comorbidities such as diabetes, chronic kidney disease, and cognitive decline necessitates individualized, multidisciplinary care plans.⁹ Indian

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guidelines recommend initiating treatment if BP \geq 140/90 mm Hg and aim to reduce it to below 130/80 mm Hg, particularly in those with cardiovascular disease, diabetes, or chronic kidney disease.⁸

India's rapidly aging population calls for an urgent and strategic shift in cardiovascular prevention policy, with hypertension control positioned as a national priority to promote healthy aging, extend disability-free life expectancy, and reduce healthcare costs. Public health efforts should focus on universal geriatric screening at all healthcare touchpoints, integration of elderly hypertension management within existing NCD programs, and strengthening primary care through training in geriatric risk assessment and medication adherence support. Engaging families and communities, particularly through ASHAs, alongside expanding telemonitoring and digital health solutions, can improve treatment continuity. Simultaneously, culturally adapted models emphasizing lifestyle modification, dietary interventions, pharmacologic optimization, and comorbidity management are essential. Aligned with NITI Aayog's Senior Care Reforms (2024), a continuum of preventive, curative, and rehabilitative care must be established. Moving forward, a triad approach, population-level prevention, primary care empowerment, and equity-focused reforms, is imperative to curb the hypertension epidemic in India's elderly, safeguard functional independence, and ensure healthy aging for millions.

Conflict of Interest

None.

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